

# PRODUCT INFORMATION

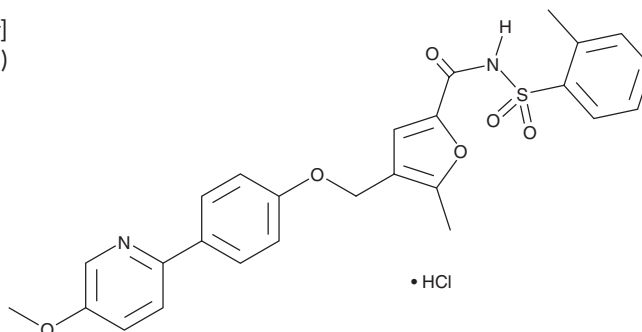


## BGC 20-1531 (hydrochloride)

Item No. 19742

**CAS Registry No.:** 1962928-26-2  
**Formal Name:** 4-[[4-(5-methoxy-2-pyridinyl)phenoxy]methyl]-5-methyl-N-[(2-methylphenyl)sulfonyl]-2-furancarboxamide, monohydrochloride

**Synonym:** PGN 1531  
**MF:** C<sub>26</sub>H<sub>24</sub>N<sub>2</sub>O<sub>6</sub>S • HCl  
**FW:** 529.0  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 202, 273 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

BGC 20-1531 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the BGC 20-1531 (hydrochloride) in the solvent of choice. BGC 20-1531 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of BGC 20-1531 (hydrochloride) in these solvents is approximately 1 mg/ml.

### Description

BGC 20-1531 is a potent and selective antagonist of the prostaglandin E<sub>2</sub> (PGE<sub>2</sub>; Item No. 14010) receptor subtype 4 (EP<sub>4</sub>) with K<sub>i</sub> values of 11.7, >10,000, and >10,000 nM for EP<sub>4</sub>, EP<sub>2</sub>, and EP<sub>3</sub>, respectively.<sup>1</sup> It is selective for EP<sub>4</sub>, exhibiting <50% inhibition at 47 ion channels, cell-surface transporters, enzymes, and nuclear receptors at a concentration of 10 μM. BGC 20-1531 antagonizes PGE<sub>2</sub>-induced cAMP accumulation in a dose-dependent manner in HEK293 EBNA cells that stably express human EP<sub>4</sub> receptors. It also reverses PGE<sub>2</sub>-induced vasorelaxation (K<sub>b</sub> = 15.85 nM) in human middle cerebral and middle meningeal arterial rings. BGC 20-1531 prevents PGE<sub>2</sub>-induced increases in carotid blood flow and decreases in carotid resistance with an ID<sub>50</sub> value of 5 mg/kg in dogs.

### Reference

1. Maubach, K.A., Davis, R.J., Clark, D.E., *et al.* BGC20-1531, a novel, potent and selective prostanoid EP<sub>4</sub> receptor antagonist: A putative new treatment for migraine headache. *Br. J. Pharmacol.* **156**(2), 316-327 (2009).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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